USDA

United States
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Service

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Short Form Botany Resource Reports:

1) Botany Resource Report
2) Biological Assessment for Threatened, Endangered, Proposed Species
3) Biological Evaluation for Sensitive Plant Species
4) Survey and Manage Report
5) Noxious Weed Risk Assessment

Little Deer Project

Goosenest Ranger District, Klamath National Forest
Siskiyou County, California

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EXECUTIVE SUMMARY

The Little Deer Project Botany Biological Assessment, Biological Evaluation, Survey and Manage Review, Noxious Weed Risk Assessment, and pre-field documents are summarized and referenced here and are part of the Botany resource report which is available on the project website. The purpose of this section is to evaluate the Little Deer project in sufficient detail to determine its effects on Endangered, Threatened, Proposed, Sensitive, and Survey and Manage plant species as well as determine the risk of introducing or spreading Noxious Weed species.

Methodology

An office pre-field review was conducted to determine if the project is within the range of any federally listed Threatened, Endangered, Proposed, Candidate, Sensitive, or Survey and Manage plant species for the Klamath National Forest, and if suitable habitat for all species of concern existed in the project area. Additionally, the review indicated whether any species of concern or invasive plant species were known to be present within the proposed project area. All species listed for the Forest were considered for this review. The Forest Noxious Weed and Non-native Invasive Plant List (USDA 2013b) was used for the invasive species review.

A preliminary field review was also conducted to confirm office predictions. The field review confirmed lack of suitable habitat for any species of concern. Assumptions specific to species of concern and invasive species are in the Botany resource report. The presence of any invasive species within the project area could not be confirmed.

Data sources used in the analysis include:

- National Databases: Natural Resources Information System (NRIS) for all species of concern, and non-native invasive species.
- Paper-based Goosenest Ranger District Sensitive Plant location and survey atlas; noxious weed location and survey atlas.
- California Natural Diversity Data Base (CNDDB) records through RareFind 5, California Department of Fish and Wildlife.
- US Fish and Wildlife Service List, Arcata Office, species of Concern.
- Klamath National Forest GIS layer: Activities.

Analysis Indicators

Threatened, Endangered, Proposed, Sensitive, and Survey & Manage plant species:

There are no plant species federally listed as Threatened, Endangered, Proposed, Candidate, Sensitive, or Survey and Manage within the project area (USDA 2014c); therefore, there will be no impacts to analyze and indicators for such an analysis are not needed.

Noxious Weeds:

The following indicator will compare alternatives:

- Risk of introduction and/or spread of non-native invasive plants measured by the elimination of risk or a rating of high, medium, or low risk.

Spatial and Temporal Context

Noxious Weeds:

The spatial boundary of the analysis area will be the project boundary; weed sites outside this area but in close proximity will not be affected by, nor will they have an effect on, the project because they are beyond dispersal distances and there are no associated project activities in those areas. It is expected that effects from potential introductions of non-native invasive species will be evident within three years in the short term, and five to ten years in the long term.

Affected Environment

There are no known sites and surveys were not triggered for any species listed as Threatened, Endangered, Proposed, Sensitive, or Survey and Manage. The field review to determine presence of non-native invasive plants revealed no species present in the project area; however, cheat grass occurs in areas on private and federal land adjacent to the project area and may spread to the project area. The Little Deer project area is highly vulnerable to the invasion of non-native invasive plant species because of the severe fire intensity that removed all vegetation and litter layers that normally compete with and impede the establishment of invasive species. The ground has no buffer from invasion of any species that may be introduced.

Environmental Consequences

Alternative 1

Direct Effects and Indirect Effects

Alternative 1 will eliminate the direct risk of introduction and/or spread of invasive species from project activities since none will take place; however, there will still be the indirect risk of introduction from non-project dependent vectors such as public traffic, wind, birds, and mammals. The likelihood that cheat grass will invade the project area regardless of whether or not the project is implemented also exists, due to its proximity immediately adjacent to the project area. Without the seeding of native perennial grasses, there will be nothing to help reduce the potential for invasion of cheat grass into the severely burned and vulnerable landscape. The risk for introduction and/or spread of non-native invasive plant species under alternative 1 is high.

Cumulative Effects

The logging on private lands within the boundaries of the Little Deer project, as discussed in appendix C, have the potential to introduce and/or spread invasive species as there are no preventative measures for invasive species required on private land. Adding the effects of alternative 1 to this potential negative effect can result in a substantial cumulative effect if an invasive species that is very difficult to control is introduced on private land and then spread to Forest lands. This can result in a landscape that will take a long time to recover.

Alternative 2

Direct Effects and Indirect Effects

The direct effect of alternative 2 in relation to invasive species is that the proposed seeding of shrub and native perennial grass species will be beneficial in minimizing the invasion of cheat grass in the areas that are seeded by providing competition for resources. An indirect beneficial effect will be in areas disturbed by equipment where cheat grass may germinate during the first spring post-fire. This equipment disturbance will open up these areas for the establishment of other species. This will help in the recovery and reforestation by species proposed for planting.

For alternatives 2, project design features have been incorporated to minimize the introduction and potential spread of noxious weed infestations. These project design features (NNIS-1 through NNIS-3 in table 2-1) will reduce the risk of spreading infestations into or within the project area, and are mandatory in all contracts. The risk of introduction and/or spread of non-native invasive plant species for the project actions in alternative 2 are low.

Cumulative Effects

Adding the effects of alternative 2 to the effects of private land projects will reduce negative cumulative effects to the invasion and spread of noxious weeds.

Alternative 3

Direct Effects and Indirect Effects

Alternative 3 does not include any seeding of native perennial grasses that may provide a beneficial direct effect in reducing the scale of cheat grass invasion. The indirect beneficial effect is the same as in alternative 2. Implementation of project design features (NNIS-1 through NNIS-3 in table 2-1) will reduce the risk of spreading infestations into or within the project area.

Cumulative Effects

Adding the effects of alternative 3 to the effects of the logging on private lands will result in cumulative effects similar to those of alternative 1, with the benefit of proposed activities on a portion of the project area that can reduce cheat grass invasion and spread.

Determination Statements

Threatened, Endangered, or Proposed plant species:

The Little Deer project is not within the range, nor is there any habitat for any federally listed Threatened, Endangered, or Proposed plant species. *It is my determination that the Little Deer project will not affect Threatened, Endangered, or Proposed plant species.*

Sensitive plants species:

The Little Deer project will not affect Sensitive plant species nor lead to a trend towards listing of these plant species.

Survey and Manage plant species:

The Little Deer project will not affect species listed as Survey and Manage.

Noxious Weeds:

There is a low risk that action alternatives in the Little Deer project will cause the introduction or spread of Forest listed noxious weeds.

Compliance with law, regulation, policy, and the Forest Plan

Threatened, Endangered, Proposed, and Sensitive Plants:

The Little Deer project complies with section 7 of the Endangered Species Act, as amended, in the preparation of a Biological Assessment, and Biological Evaluation; Forest Service Policy (FSM 2670), and Forest Plan standards for Sensitive plant species as displayed in the Forest Plan consistency checklist, available on the project website.

Survey and Manage Plants:

There is no habitat or known sites of survey and manage plant species in the Little Deer project; therefore, this project complies with the 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines as there is no habitat or known sites of survey and manage plant species in the project area.

Noxious Weeds

The Little Deer project complies with Executive Order #13112 and the Forest Service Manual 2900. It also complies with and Forest Plan standards for noxious weed species as displayed in the Forest Plan consistency checklist, available on the project website.

BOTANY REPORT

Introduction

The purpose of this document is to evaluate the Little Deer Project in sufficient detail to determine its effects on Threatened, Endangered, Proposed, Candidate, Sensitive (TEPCS), or other plant species of concern, including Survey and Manage (S&M) bryophyte, lichen, fungi, and vascular plant species. In addition, this document includes the Noxious Weed (NNIS) Risk Assessment for the project area. This report is prepared in accordance with the requirements set forth under Section 7 of the Endangered Species Act [19 U.S.C. 1536 (c)], and follows the standards established in the Forest Service Manual direction, FSM 2672.42 for Sensitive plants and FSM 2900 for Invasive Species Management.

The project is located eight miles west of Bray and about 12 miles southwest of Macdoel, California in Siskiyou County. For a complete description of the legal location, the Proposed Action, and the Alternatives, see Chapters One and Two, respectively, of the Little Deer EA.

Current Management Direction

Threatened and Endangered Species

Section 7 of the Endangered Species Act of 1973, as amended, and Forest Service Policy (FSM 2670) direct Federal agencies to ensure that any action authorized, funded, or permitted by such agencies is not likely to jeopardize the continued existence of species listed, or proposed to be listed as Endangered or Threatened by the U.S. Fish and Wildlife Service.

Sensitive Species

Forest Service Policy (FSM 2670) directs Federal agencies to ensure that any action authorized, funded, or permitted by such agencies is not likely to jeopardize the continued existence of species listed as Sensitive by the Regional Forester, or to cause a trend to federal listing for species listed as Sensitive (USDA 2005). Forest Service Policy (FSM 2672) also gives direction for the preparation of Biological Evaluations (USDA 2009). Forest-wide Standards and Guidelines have been developed that direct the management of Sensitive plant species to ensure maintenance of reproducing, self-sustaining populations and to prevent the need for the species to become listed as Threatened or Endangered (USDA 1995).

Survey and Manage Species

The Bureau of Land Management and Forest Service adopted standards and guidelines for the management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl, commonly known as the Northwest Forest Plan (NWFP). The NWFP included measures for management of known sites, site-specific pre-habitat disturbing surveys, and/or landscape scale surveys for about 400 rare and/or isolated species. The standards and guidelines for these mitigation measures are known as survey and manage.

To be in compliance with the 2001 Record of Decision for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines (USDA/USDI 2001), projects must have pre-disturbance surveys conducted if the activity is potentially considered to be habitat-disturbing, and known sites must be managed to protect

persistence at the site. "Habitat-disturbing activities are defined as those disturbances likely to have a significant negative impact on the species' habitat, its life cycle, microclimate, or life support requirements" (USDA/USDI 2001 – Standards and Guidelines, p.22). The most recent Survey and Manage direction issued on May 13, 2014 directs Agencies to follow the 2001 S&M ROD standards and guidelines, and the December 2003 species list, except for the red tree vole which remains a Category C, and/or the four categories of projects exempt from the Survey and Manage standards and guidelines as stipulated by Judge Pechman on October 11, 2006 (USDA 2014a).

Non-native Invasive Species

Forest Service Manual 2900 Invasive Species Management (USDA 2011) includes a policy statement calling for a risk assessment for noxious weeds to be completed for every project. The Klamath National Forest has placed a high priority on management of noxious weeds. Management includes reducing management related introduction and spread of noxious weeds on the Forest. The Forest Plan includes Forest-wide Standards and Guidelines for vegetative management that call for all silvicultural practices to consider how to best prevent introducing noxious or alien weeds. Additional direction is found in Executive Order #13112: *Invasive species* by President William Clinton to prevent the introduction of invasive species and provide for their control (Clinton 1999).

Analysis Indicators

The analysis indicators for TEPCS species are not likely to differ between alternatives due to law regulation and policy directing management of those species where protection is paramount, and in most cases, protection measures are incorporated into project design. S&M species are managed for protection of all known sites. Risk of introduction/spread of invasive species is likely to be sensitive to different alternatives.

Table 1: Analysis Indicators

Botany Threatened and Endangered Species	• Likelihood that the project will have effects on populations.
Botany Sensitive Species	• Likelihood that the project effects will lead to a trend towards listing as Endangered.
Botany Survey and Manage Species	• Likelihood that the project will have effects on populations.
Botany Non-native Invasive Plant Species	• Risk of introduction and/or spread: risk is eliminated, or is High, Medium, or Low.

Methodology

An office pre-field review was conducted to determine if the project is within the range of any federally listed Threatened, Endangered, Proposed, Candidate, Sensitive, or Survey and Manage plant species for the Klamath National Forest, and if suitable habitat for all species of concern existed in the project area. Additionally, the review indicated whether any species of concern or

invasive plant species were known to be present within the proposed project area. All species listed for the Forest were considered for this review. The Forest Noxious Weed and Non-native Invasive Plant List, (USDA, 2013b) was used for the invasive species review.

A preliminary field review was also conducted to confirm office predictions. Surveys for TEPCS are not required for species that either lack suitable habitat in the project area, or for which the project area is outside the currently known range the range of the species. Surveys for Survey and Manage species are not required if habitat does not exist. The field review confirmed lack of suitable habitat for any species of concern. The presence of any invasive species within the project area could not be confirmed.

Pre-field Review and results of preliminary field review Documents, A-1, A-2, and A-3 (USDA 2014c) will be part of the electronic project record on the project website.

Assumptions Specific to Species of Concern and Invasive Species

Species of Concern:

- There are no known occurrences of TEPS plant species in the project area, and none are expected due to lack of habitat.
- If populations of TEPS plant species are located during project implementation, those areas will be protected and/or mitigated as necessary as stated in project design feature BOT-1 in section 2.6 of the EA.

Invasive Species:

- There are currently no known locations of non-native invasive plant species (NNIS) within the project boundary on National Forest System lands.
- Surveys for NNIS within the project boundary have not been conducted in the last five years.
- Inclusions of privately owned lands within the project boundary may contain infestations of NNIS that were previously unknown; these may spread to National Forest System lands regardless of our actions and efforts at prevention and control of NNIS on Forest lands.
- Once established, NNIS are likely to persist long term.

Data Sources

- National Databases: Natural Resources Information System (NRIS) for all species of concern, and NNIS.
- Paper-based Goosenest Ranger District Sensitive Plant location and survey atlas; noxious weed location and survey atlas.
- California Natural Diversity Data Base (CNDDB) records through RareFind 5, California Department of Fish and Wildlife.
- US Fish and Wildlife Service List, Arcata Office, species of Concern.
- Klamath National Forest GIS layer: Activities.

Spatial and Temporal Bounding of Analysis Area

The spatial boundary of the analysis area will be the project boundary. Potential effects to species of concern from the project would not differ with a larger boundary, as the nearest populations adjacent to the project area are quite a distance away. This spatial boundary will also apply to non-native invasive plant species. The weed sites in close proximity to the project area will not be affected, nor will they have an effect on the project.

The temporal boundary for the analysis will be three years for short term effects, and 5-10 years for long term effects. The only likely effect of the project will be in relation to NNIS, and it is expected that effects from potential introductions of NNIS will be evident within three years in the short term, and 5-10 years in the long term.

BIOLOGICAL ASSESSMENT FOR THREATENED, ENDANGERED, AND PROPOSED PLANT SPECIES

Introduction

Species list addressed: Federal T, E, P, or C (Candidate) plant species (USDI 2014)

Project area reviewed for presence of populations, habitat, and range: Yes

Methodology

As part of the pre-field review process, the Arcata Field Office, U.S. Fish and Wildlife Service (USFWS) website was consulted for a list of species of concern for the Grass Lake, and Penoyar Quadrangles (USDI 2014). There were no plant species of concern on the lists for either quadrangle. Preliminary field review confirmed there is no habitat, and surveys were not necessary for any T, E, P, or C species in the project area.

Consultation to Date

None required.

Affected Environment

The Little Deer Project is not within the range and/or habitat of any plant species listed as Threatened, Endangered, Proposed, or Candidate. No populations of any federally listed plant species have been recorded in botanical records or identified in previous surveys, and no critical habitat is established for any species in the project area.

Environmental Consequences

Since there are no known sites or habitat in the project area, there will be no direct, indirect, or cumulative effects to federally listed plant species from any of the three alternatives. Additionally, there are no activities that are interrelated or interdependent to the proposed action that will affect any TEPC species. There will be no effects to TEPC species to compare between alternatives for this project.

Determination of Effects

The Little Deer Project is not within the range of any federally listed TEP plant species. A field review has been conducted, and no potentially suitable habitat has been located. *It is my determination that the Little Deer Project will not affect any T, E, P, or C species.*

Compliance with law, regulation, policy, and the Forest Plan

The Klamath National Forest has complied with law, regulation, and policy by preparing this Biological Assessment, and documenting that the Little Deer project will not affect any Threatened, Endangered, Proposed, or Candidate plant species.

BIOLOGICAL EVALUATION

Introduction

Species list addressed: Klamath National Forest Sensitive Plant Species (USDA 2013a)

Project area reviewed for presence of populations, habitat, and range: Yes

Methodology

Field surveys were not triggered for any species listed as Sensitive. Preliminary field review confirmed lack of habitat for any Klamath National Forest Sensitive plant species.

Affected Environment

There are no known sites of Sensitive plants within the project area, and preliminary field review confirmed lack of habitat for any Sensitive plant species. Therefore, there will be no effects to Sensitive plant species to compare between alternatives for this project.

Environmental Consequences

Since there are no known sites in the project area, there will be no direct, indirect, or cumulative effects to Sensitive Species with any of the three alternatives. There will be no effects to Sensitive species to compare between alternatives for this project.

Determination of Effects

It is my determination that the Little Deer Project will not affect Sensitive plant species.

Compliance with Law, Regulation, Policy, and the Forest Plan

The Klamath National Forest has complied with law, regulation, and policy by preparing this Biological Evaluation, and documenting that the Little Deer project will not affect any Sensitive plant species. Additionally, Forest Service Policy (FSM 2670), and Forest Plan Standards and Guidelines for Sensitive plant species have been addressed and are not applicable, as there are no Sensitive plant species in the project area.

SURVEY AND MANAGE PLANT REPORT

Introduction

Species list addressed: Survey and Manage Table 1-1 (USDA 2014a)

Project area reviewed for presence of populations, habitat, and range: Yes

Methodology

Pre-field review did not indicate any known sites for species listed as 'manage known sites; and manage high priority sites (Category B, D, or E) and there are no known sites present in locations that may be affected by project activities (USDA 2014b). The project area is exempt from Equivalent Effort fungi surveys because ground disturbing activities would not occur in stands defined as old-growth (USDA 2014a). Preliminary field review confirmed lack of habitat for any Survey and Manage plant species or fungi.

Affected Environment

The preliminary field review indicated no habitat for Survey and Manage Species was present, and therefore no species are expected to occur.

Environmental Consequences

Since there are no known populations or habitat for Survey and Manage species, there will be no direct, indirect, or cumulative effects from any of the three alternatives. The project will not affect species listed as Survey and Manage.

Compliance with law, regulation, policy, and the Forest Plan

The Klamath National Forest has complied with the 2001 Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measure Standards and Guidelines, by assessing the project area and determining that there is no habitat or known sites of survey and manage plant species that will be affected by the project.

NOXIOUS WEED RISK ASSESSMENT

Introduction

Species list addressed: Klamath National Forest Noxious Weed and Non-native Invasive Plant List (USDA 2013b)

Project area reviewed for presence of infestations: Yes

Affected Environment

There were no noxious weeds previously mapped in the project area prior to the fire, and none were visible within the project boundary during the preliminary field review conducted on October 16, 2014. There was however, cheat grass visible directly adjacent to the project area on unburned Klamath National Forest and private lands.

Environmental Consequences

The Little Deer project area is highly vulnerable to the invasion of non-native invasive plant species because of the severe fire intensity that removed all vegetation and litter layers that normally compete with and impede the establishment of invasive species. The bare ground has no buffer from invasion of any species that may be introduced, and functionally has higher nutritional availability for the establishment of all species due to the ash layer which provides a flush of nitrogen.

Alternative 1

Direct and Indirect Effects

Currently, there are no invasive species known or visible in the project area. Alternative 1 will eliminate the **direct** risk of introduction and/or spread of invasive species from project activities since none will take place; however, there will still be the **indirect** risk of introduction from non-project dependent vectors, such as public traffic, wind, birds, and mammals. The likelihood that cheat grass will invade the project area regardless of whether or not the project is implemented also exists, due to its proximity immediately adjacent to the project area. Without the seeding of native perennial grasses as proposed in alternative 2, there will be nothing to help reduce the potential for invasion of cheat grass into the severely burned and vulnerable landscape.

Cumulative Effects

The logging on private lands within the boundaries of the Little Deer project, as discussed in appendix C of the EA, have the potential to introduce and/or spread invasive species, as there are no preventative measures for invasive species required in the private sector. This potential negative effect could result in a significant cumulative effect if an invasive species that is very difficult to control was introduced on private land and then spread to Forest lands. Added to the indirect effects of the potential invasion of cheat grass into the project area, alternative 1 could result in a landscape that will take much longer to recover than if we had implemented other action alternatives.

The risk for introduction and/or spread of non-native invasive plant species under alternative 1 is high.

Alternative 2

Direct and Indirect Effects

The direct effect of alternative 2 in relation to invasive species is that the proposed seeding of shrub and native perennial grass species could be beneficial in minimizing the invasion of cheat grass in the areas that are seeded, by providing competition for resources. An indirect beneficial effect that could occur would be that areas disturbed by equipment where cheat grass was germinating in the first spring post-fire would be open for establishment of other species. This could aid in the recovery and reforestation with species proposed for planting.

Cumulative Effects

As in alternative 1, the logging on private lands within the boundaries of the Little Deer project has the potential to introduce invasive species not currently present. The cumulative effects for alternative 2 are reduced in scale from alternative 1 due to the proposed seeding of native perennial grasses, the disturbance of areas that might otherwise be invaded by cheat grass, and the inclusion of project design features aimed at reducing the risk for introduction of invasive species.

The risk of introduction and/or spread of non-native invasive plant species for the project actions in alternative 2 are low; however the actions on private land still pose a high risk of introducing non-native invasive species to the area.

Alternative 3

Direct and Indirect Effects

Alternative 3 does not include any seeding of native perennial grasses that may provide a beneficial direct effect in reducing the scale of cheat grass invasion. The indirect beneficial effect is the same as in alternative 2.

Cumulative Effects

As in alternatives 1 and 2, the logging on private lands within the boundaries of the Little Deer project has the potential to introduce invasive species not currently present. Cumulative effects are similar in scale to alternative 1, with the benefit of proposed activities on a portion of the project area that could reduce cheat grass invasion in the areas that will be disturbed by activities by.

Project design features have been incorporated into the proposed action to minimize the potential spread of noxious weed infestations. These project design features will be sufficient to reduce the risk of spreading infestations into or out of the project area, and are mandatory in all contracts: Equipment Cleaning and Weed Free Materials.

Compliance with law, regulation, policy, and the Forest Plan

Forest Service Manual 2900 direction has been met by preparing this risk assessment. Forest Plan Standards and Guidelines have been met by incorporating project design features that will reduce the risk of introduction and/or spread of invasive plant species.

The following table displays the effects of all the alternatives on the botanical species of concern in this report.

Table 2: Comparison of Effects of Alternatives to Botanical Species of Concern.

	Alternative 1 (No Action)	**Alternative 2 (Proposed Action)**	**Alternative 3**
Non-native Invasive Species	Risk of spread is high.	Risk of spread is low.	Risk of spread is moderate.
Threatened, Endangered, Sensitive, Survey and Manage Species	There are no Threatened or Endangered species of plants, Forest Service sensitive plants or survey and manage species so there are no effects.	Same as alternative 1.	Same as alternative 1.

Literature Cited

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USDA Forest Service 2013a. 2670: *Federally Listed and Sensitive Plant Species.* July 2013. Klamath National Forest.

USDA Forest Service 2013b. *Klamath National Forest Noxious Weed and Nonnative Invasive Plant List.* March 29, 2013.

USDA Forest Service 2014a. Direction Regarding the Survey and Manage Standards and Guidelines: Letter to Forest Supervisors within the Northwest Forest Plan Area. May 13, 2014.

USDA Forest Service 2014b. Botanical Pre-field Review Documents: *A-1: Manage Known Sites Table; A-2: Analysis Flowchart; A-3: Review of Proposed Projects and Results of Preliminary Field Review.* Little Deer Project. October 22, 2014. Klamath National Forest.

USDA Forest Service and USDI Bureau of Land Management, January 2001. Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines in Forest Service and Bureau of Land Management Planning Documents within the Range of the northern spotted owl.

USDI Fish and Wildlife Service 2014. Arcata Field Office. Species List for the Grass Lake and Penoyar Quadrangles, Klamath National Forest, Document numbers 888820687-15534 and 889042207-15713, respectively. October 21, 2014.

Appendix A – Botany Project Map

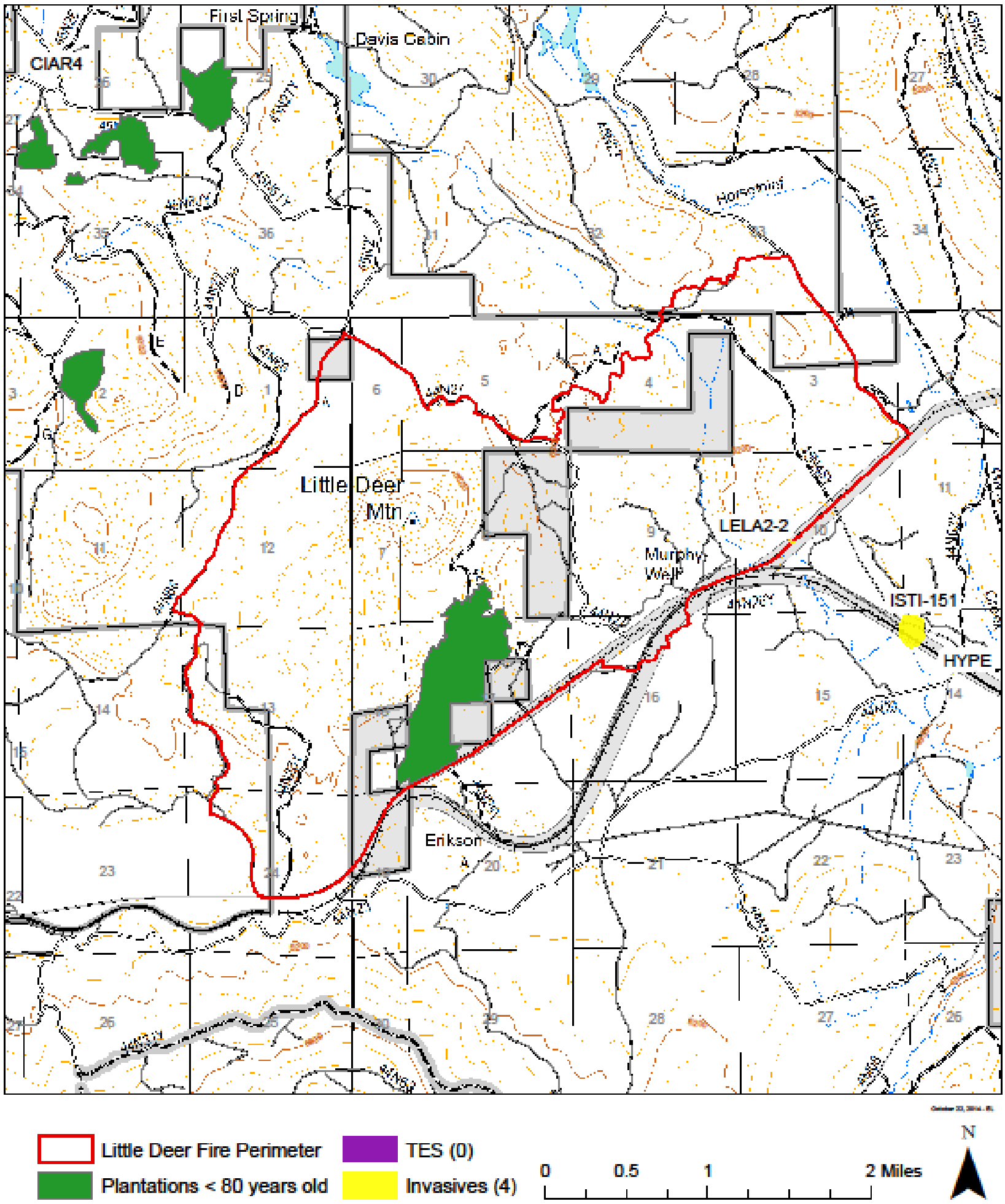

Figure A- 1: Locations of plantations and invasive species within the Little Deer Fire perimeter